

CLAIMS

1. A method for processing magnetic resonance imaging image information characterized by that a magnetic resonance spectral intensity value is measured at each of a plurality
5 of measuring points that are arranged at predetermined intervals along a lengthwise direction, a crosswise direction and a height direction on an object to be measured and several kinds of magnetic resonance imaging image information as a set of the magnetic resonance spectral
10 intensity values measured at the measuring point are obtained by a plurality of different spectral intensity measuring methods with respect to the object to be measured, a magnetic resonance spectral intensity value at the predetermined position is obtained directly or indirectly
15 from a measured results of the magnetic resonance spectral intensity values that is included in the magnetic resonance imaging image information and the predetermined position is set to be identical for all of the several varieties of magnetic resonance imaging image information with respect to
20 each of the magnetic resonance imaging image information, and
new image information at the predetermined position is derived by linear calculation between the spectral intensity values.

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2. The method for processing magnetic resonance imaging image information described in claim 1, and characterized by the new image information is information showing a bone

structure.

3. The method for processing magnetic resonance imaging image information described in claim 1 or 2, and
- 5 characterized by that magnetic resonance imaging image information by a magnetic longitudinal relaxation measurement and magnetic resonance imaging image information by a magnetic transverse relaxation measurement are obtained.
- 10 4. The method for processing magnetic resonance imaging image information described in claim 3, and characterized by that magnetic resonance imaging image information by a nuclear density measurement is further obtained.
- 15 5. The method for processing magnetic resonance imaging image information described in claim 1, 2, 3 or 4, and characterized by that with respect to at least one kind of the magnetic resonance imaging image information, a magnetic resonance spectral intensity value at the predetermined
- 20 position is obtained by interpolation of the measured results of the magnetic resonance spectral intensity value that is included in the magnetic resonance imaging image information.
- 25 6. The method for processing magnetic resonance imaging image information in claim 1, 2, 3, 4 or 5, and characterized by that the magnetic resonance spectral intensity value is a hydrogen nucleus magnetic resonance

spectral intensity value.

7. The method for processing magnetic resonance imaging image information described in claim 1, 2, 3, 4, 5 or 6, and
5 characterized by that a comparison is further made between new image information obtained by a linear calculation of the spectral intensity values at the predetermined position and image information obtained by an X-ray computed tomography.

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8. A magnetic resonance imaging system that is used in the method for processing magnetic resonance imaging image information described in claim 1, 2, 3, 4, 5, 6 or 7, characterized by further functioning at least as an
15 information obtaining portion that obtains magnetic resonance imaging image information, a first obtained image information storing portion that stores magnetic resonance imaging image information obtained by a predetermined method, a second obtained image information storing portion that
20 stores magnetic resonance imaging image information obtained by a method different from the predetermined method, a linear calculation portion that conducts a linear calculation based on the magnetic resonance imaging image information stored in the first obtained image information
25 storing portion and the magnetic resonance imaging image information stored in the second obtained image information storing portion, a calculated result image information storing portion that stores new image information as a

calculated result of the linear calculation portion and an image output portion that outputs an image based on the image information stored in the calculated result image information storing portion.

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9. The magnetic resonance imaging system described in claim 8, and characterized by that further functioning as an interpolating calculation portion that three-dimensionally aligns the magnetic resonance imaging image information stored in the first obtained image information storing portion with the magnetic resonance imaging image information stored in the second obtained image information storing portion and a spectral intensity value at the predetermined position set identical to other measuring point is obtained by interpolation of the magnetic resonance imaging image information stored in either one of the first and the second obtained image information storing portions.

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